

HUXLEY'S PHYSIOLOGY.

Lessons in Elementary Physiology. By Thomas H. Huxley, LL.D., F.R.S. Enlarged and revised edition. Pp. xxiv + 611. (London: Macmillan and Co., Ltd., 1900.)

HUXLEY'S "Lessons in Elementary Physiology" was probably the best book of its kind which has ever been written. It set forth the elements of human anatomy and physiology in so clear and concise a form, and the little volume formed so complete a compendium of the essential facts which had accumulated in the science with which it dealt, that it was at once welcomed as supplying a want which had long been felt—that of a popular and, at the same time, an authoritative exposition of the subject. Its success was enormous. Edition after edition was sold in rapid succession, and the booklet—for it was nothing more—was not only adopted in schools throughout this country as *the* text-book with which the teaching of physiology was to be begun, but it was soon translated into every civilised language, and even, it is said, into more than one barbaric tongue.

The secret of its success lies on the surface. It was written in the English which was characteristic of the Master: its language trenchant, flowing, and well chosen, its similes apposite, its facts duly marshalled and leading up to their logical conclusion. And the book was what it was intended to be—a popular account, which, while retaining scientific accuracy, should not be burthened by unnecessary details, nor by theories which might or might not ultimately prove correct. Moreover, the ground was clear—where there are now a dozen similar treatises, there was then not one. But it is safe to assert that "Huxley" would in any case have taken the first place.

An entirely new edition of the "Lessons"—the first since the lamented death of the original author—has now made its appearance under the auspices of Sir Michael Foster and Dr. Sheridan Lea. Michael Foster has been associated with the book throughout its whole career. Sheridan Lea's name appears now for the first time in connection with it; but although the responsibility is joint, the labours of preparation have fallen chiefly upon Dr. Lea's shoulders. We may be sure that the work has been a labour of love to the editors. The intimate friendship which existed between them and Huxley, their veneration for his memory, their desire to maintain the high standard and reputation of the work, must have caused them to put forth their best efforts to ensure its continued success.

In surveying the changes which have been introduced, the point of chief interest appears to be to notice whether the introduction of these changes has tended in any way to modify the original character of the work. We have already seen that this character was that of a popular exposition of the science suitable especially for schools, and the questions naturally arise, is the book still of this nature? Has it been modified to suit it to other purposes than that for which its author originally wrote it?¹ It must be conceded that the book retains in a measure its character as a popular expositor. This is largely owing to the fact that the editors have

¹ "The following 'Lessons in Elementary Physiology' are primarily intended to serve the purposes of a text-book for teachers and learners in boys' and girls' schools."—*Extract from Preface to the First Edition, 1866.*

preserved "as far as possible the original author's own form of exposition and indeed his own words." But it must also be admitted that its character in this respect has been modified by changes and additions. The purport of these appears to have been to adapt the book for use by students of medicine, a design which may be laudable but cannot fail to affect the general tone of the work. Students of medicine require to learn anatomy and physiology with a minuteness of detail not necessary in a work which is intended to be of a popular nature. Not only is it important that the unquestioned facts of the science should be set before them, but they require also to be made cognizant of statements which, however probable, are not universally accepted as facts, and of theories which may or may not ultimately prove to be correct. And herein it appears to me lies the difference between the new "Huxley" and the old. That the change tends, as the editors claim, to increase the sphere of usefulness of the work, may be perfectly true, but the essential character and original aim of the work has been thereby affected. If there is a gain on the one side there is a loss on the other, and it is impossible that it should not be so; it is a question of opinion whether the gain counterbalances the loss. For my own part, while recognising the able manner in which the new material is worked up and incorporated with the old and the increased value which is thereby imparted to the work as a text-book preliminary to the study of physiology, I must frankly confess that I regret the change. Students of medicine have already more than one elementary text-book in which the facts and chief theories of physiology are set forth with all the clearness that could be desired, and in one instance at least with a wealth of illustration which cannot be surpassed or even approached in a book of so small a size as "Huxley." On the other hand, the amount of detail which has been introduced into this edition, while valuable for the medical student, is unnecessary or unsuitable for the school boy. Perhaps it was impossible to avoid this change, perhaps it was desirable to make it; at any rate it has been made, and as years go on the development of the book must proceed along the lines which have been now laid down. That it will be as successful on these lines as it has been upon the old ones may be confidently assumed so long as it remains under the management of the present editors, but I believe that my regret that the change has been introduced will be shared by most of those who remember the appearance of the original book in the late sixties and the enthusiasm with which it was then received.

E. A. SCHÄFER.

THE GLUCOSIDES.

Die Glykoside. By Dr. J. J. I. van Rijn. Pp. xvi + 511. (Berlin: Gebr. Borntraeger, 1900.)

THE student of chemistry or botany, who may have attempted to grope his way through the tangle of chemical facts relating to plant products, will be grateful to the author of this exhaustive monograph on the glucosides, or *glykosides* as he prefers to spell it, where the latest information, with all the necessary references, is easily found.

